ABSTRACT

Methods and apparatus for recirculating air in a controlled ventilated environment. In one example, recirculation of air from one or more rooms in a multiple room ventilated environment having a common source of supply air is controlled such that minimum ventilation and thermal load requirements for each room are satisfied independently, so as to facilitate a reduction in the amount of fresh outside air required for the environment. In another example, the controlled airflows in each room may be based additionally on respective air quality levels of the air drawn from each room. In one aspect, if contaminants are detected in one or more rooms of the ventilated environment, the amount of air recirculated from a contaminated room back to the environment may be controlled based on a detected level of the contaminant and a dilution ratio of any returned contaminated air to the total uncontaminated air supplied to the environment.

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